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ABSTRACT

The development of behavioral parent training research and changes that have taken place in the field over the past 20 years are reviewed. The author describes the evolution according to three phases. Phase 1, Early Work-Child Focus (1960-1970), is seen to have emphasized the analysis of child behavior change. Phase 2, Mid-Period--Parent Focus (1970-1980), considered child behavior change as a function of parent behavior change. Phase 3, Family Focus, explored the impact of training techniques on both parent and child behavior. Each phase is analyzed along four dimensions: objectives, related influences, measurement, and findings. It is suggested that the file is moving in two separate directions: the development of intervention techniques that treat specific behavior problems applicable to many children and families, and development of intervention approaches to treating comprehensive family interaction problems, such as child abuse. Common problems of documentation and measurement are cited for both approaches, as are the advantages of a combination of the approaches. (CL)

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Two Emerging Models of Parent Training: General and Problem-Specific

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Abstract

This article reviews the history and development of behavioral approaches in teaching parents more effective child-management and child-teaching skills. From initial efforts in which simple descriptions of training and outcome effects were predominant, the field has moved to a more sophisticated description, analysis, and evaluation of training techniques and outcome measurement in which the behavioral changes of the child, the parent, and the therapist are documented. These developments have produced two general findings: The first is the frequently documented failure for behavior changes to be maintained over time or to be generalized to other settings; the second is the carefully noted discrepancies in the evaluation of outcome effects that occur between what is basically parental verbal behavior (viz., questionnaires) and actual parent-child interaction behaviors (viz., direct observation).

These findings, however, appear to be limited to parent-training efforts that focus on changing general parent-child interaction patterns and not to parent-training efforts that focus on changing specific time or setting-limited problem behaviors. Thus, the field is moving in two separate, and equally, important, directions--the development of intervention techniques that treat very specific problem behaviors or skill deficits applicable to many children and families (e.g., bedwetting), and secondly, the development of intervention techniques treating comprehensive family-interaction problems (e.g., child abuse). These two directions are theoretically compatible with both the hallmarks of behavioral specificity, controlled by discriminative stimuli and the development of generalized response patterns in human learning and interaction. Examples of both these directions are described and drawn both from the author's own work and the work of other researchers.

The history of behavorial approaches to parent training reflects in specific the general changes that have occurred in the field of applied behavior analysis. From initial efforts in which simple descriptions of training and outcome effects predominated, the field has moved to a more sophisticated description, analysis, and evaluation of training techniques and outcome measurement.

In early parent-training research, efforts documented changes only in the child's behavior; subsequent research expanded the focus to include documentation of changes in children's and parents' behavior; and recent research is directed toward the measurement of behavior change in the children's, the parents', and the trainers' behavior. This shift, from measurement of the dependent variable only, to measurement of the complete hierarchy of dependent and independent variables, has occurred as a result of improvements in measurement methodology and treatment technology. Not only do we now know <u>how</u> to measure our effectiveness, we also know <u>what</u> skills to teach to improve our effectiveness. Nevertheless, we still have much to learn about how families develop healthy and dysfunctional relationships and how we teach parents those proven techniques for child-behavior change.

The purpose of this paper is to review the development of behavioral parent-training research and to trace the changes that have occurred over the past twenty years. I have divided this approximately twenty-year span into three phases.

The first phase, Early Work--Child Focus, emphasized the analysis and measurement of the first, and most critical, dependent variable: child-behavior change. The second phase, Mid-Period--Parent Focus, explored the relationship between the most basic dependent variable and the first-order independent variable: child behavior change as a function of parent behavior change. The current phase--Family Focus, involves the exploration of the impact of the second-order independent variables (training techniques) on both the first-order independent variables (parent behavior) and the primary dependent measure (child behavior). The current question is, what techniques (trainer behavior--second-order independent variables) produce what level and types of changes in parenting skills (parent behavior--first order independent variable) that produce what level and types of changes in children's behavior (the primary dependent variable)?

Each phase could, of course, be described on a number of different dimensions. However, I have selected four main dimensions on which to base the following discussion. Thus, each time period or developmental phase will be summarized on these four dimensions:

1. Objectives
2. Related Influences
3. Measurement
4. Findings

These four dimensions include the aims of the researcher-practitioners working with children and their families, the related findings that influenced their approaches, how behavior changes were measured, and the conclusions that were drawn from their efforts.

Early Work: Child Focus (1960-1970)

This period actually represents a transition time from work done in the animal and human behavior research laboratories discovering and establishing the basic principles of operant psychology, to the application of these behavioral principles to "real world" human behavior.

Objectives. The objectives of researchers at this time were first, to discover examples of everyday human behavior that could be predicted, analyzed, and established using the basic discriminative-stimulus reinforcement paradigm. Second, interest arose in actually solving specific behavior problems of the target subjects. Thus, when the article by Williams (1959) was published describing an example of an extinction process and its resultant data curve in reducing the night-time crying of a young child, the study was of greater import to the scientific community for its demonstration

of the applicability of behavioral principles to everyday human behavior than to the therapeutic community for its demonstration of a technique to resolve a common childhood difficulty. Other research published at this time reflected this same sense of curiosity about the process and limited interest in the outcome--problem resolution (e.g., Patterson, 1965; Baer & Sherman, 1964). Nevertheless, this emerging technology was to be shaped into an important therapeutic technology within a fairly short period of time because of other related concerns that appeared about the same time.

Related Influences. In order to demonstrate the generality (and utility) of behavioral principles, researchers sought to extend their findings by working with human organisms with fairly limited behavioral repertoires. Human subjects were needed who would be a step beyond the animals used in research but not nearly as sophisticated as college students. Additionally, these subjects had to be accessible on a daily basis for experimental sessions. These requirements, along with the interest in basic learning processes, made retarded persons and young children in preschools the perfect subjects.

During this same time period in the United States, the early sixties, there was a tremendous move toward the conceptualization of many of societal problems as environmentally produced. Commitments to helping the poor, the uneducated, the discriminated against, the sick, and the retarded were undertaken by the federal government. There

was a belief in man's ability to adapt, to learn, and to change through education. Thus, the financial framework, political climates, and belief structure coalesced to foster the development of large-scale behavior change programs through education during this crucial time period. Behavioral learning psychologists and educators were just then beginning to work with those suddenly important populations on just the sorts of problems that were the focus of this national commitment. Support for the rapid development of an applied behavior technology to solve educational and behavioral problems was immediately forthcoming. Those psychologists who had ventured out of their laboratories to begin basic research with humans quickly found themselves attempting to build an experimental analysis of behavior in applied settings such as classrooms, hospitals, institutions, and homes.

Measurement. Basic to all behavioral research and treatment is the observation and measurement of the target behavior. Early work in the area of behavioral parent training was no exception. Early efforts focused on measuring those child behaviors parents and teachers wished to change, the dependent variables. Many studies documented the effectiveness of behavioral technology to reduce or increase a wide variety of specific behaviors. Parents were taught to modify their children's oppositional/noncompliant behavior (e.g., Wahler, Winkel, Peterson, & Morrison, 1965; Wahler, 1969a;

Hawkins, Peterson, Schweid, & Bijou, 1966; and Zeilberger, Sampen, & Sloane, 1968); self-abusive behaviors (e.g., Allen & Harris, 1966; Patterson, McNeal, Hawkins, & Phelps, 1967); self-help skills (e.g., Wolf, Risley, & Mees, 1964; and Graziano, 1970); arguing, negative comments, screaming (e.g., Hawkins, Peterson, Schweid, & Bijou, 1966; Bernal, Duryee, Pruett, & Burns, 1968; and Veenstra, 1971); and verbalizations (e.g., Wolf, Risley, & Mees, 1974; Risley, 1968).

Often the measurement systems used were quite simple such as frequency counts (e.g., Wolf, Risley, & Mees, 1964; Holland, 1969). Measurement was also restricted to child behavior and did not include the measurement of the behaviors the researchers were attempting to modify directly parent behavior. Coupled with limited descriptions of how the parent training was accomplished--the independent variable, the results of this phase were encouraging on a case-by-case basis. Despite the limited measures, these measures very clearly verified the researchers' hypotheses that children's behavior, particularly children's deviant behavior, could be described as operant. That is, children's behavior could be predictably analyzed and modified according to the basic principles of operant psychology proposed by B. F. Skinner and others (e.g., Skinner, 1953; Ferster & Skinner, 1957).

Additionally, these measures which were far more sophisticated than those typically employed in psychological investigations of human behavior, were providing data-based

evaluations of various learning and psychotherapeutic techniques. These data very clearly suggested that these techniques were effective in teaching children more material, more quickly, and more enjoyably than had previously been supposed possible. Indeed, retarded children could learn, and behaviorally deviant children could be helped.

Findings. Thus, during this period, three specific results were obtained. First, a number of limited behavior change programs for the modification of children's deviant behavior were developed. The field now had a fairly good idea of how to resolve bedtime crying in young children (Williams, 1959), how to teach children specific motor or verbal behaviors (e.g., wearing glasses and talking -- Wolf, Risley, & Mees, 1964), and how to reduce seriously deviant behavior by children (e.g., tantrums--Zeilberger, Sampen, & Sloane, 1968). Second, it was now clear that parents could be effective behavior modifiers of, or therapists for, their children. In the past, most problem or handicapped children had been institutionalized or could only be taught or treated by professionals (if they could be taught or treated at all). As a result, many children were simply not treated and not taught. Behavioral parent training appeared to be an effective and inexpensive way to treat and teach many children at home without the necessity of participating in long-term, expensive, hard-to-find therapeutic programs.

On the scientific front, a large body of data was being

built that indicated that human behavior was subject to the same principles of operant psychology as animal behavior. Human behavior (learning) was predictable and systematic, and an understanding of human behavior did not necessarily require recourse to the inner workings of the mind, to mentalistic processes hidden from view, analysis, understanding, and treatment.

At this point in time, behavioral researchers and therapists were still pretty much one and the same. Behavioral researchers were becoming behavioral problem-solvers, and as behavioral therapists they were investigating new techniques with new populations on new behaviors in new settings. It was during the next phase or time period that divisions in efforts and individuals involved began to occur.

Mid-Period: Parent Focus (1970-1980)

Now that people knew that behavioral techniques were effective, the emphasis in behavioral parent training shifted from attempts to prove that a given technique could work at all to attempts to discover what behavior change techniques were most effective in modifying various kinds of child behavior (e.g., Scarboro & Forehand, 1975; Budd, Green, & Baer, 1976).

During the early period, techniques to change children's behavior were of primary interest and little emphasis was placed on how the parent training actually was accomplished (e.g., Zeilberger, Sampen, & Sloane, 1968). During the middle period, the field began to look much more closely at the techniques that were used to modify parental

behavior--the independent variable. This concern became even more serious as people began to attempt to train parents in applied settings and met with grave difficulties in achieving successful outcomes (e.g., Ferber, Keeley, & Shemberg, 1974). Finally, both researchers and therapists became increasingly interested in the questions of whether the skills taught to parents and children were maintained over time and whether parents could apply the same or similar techniques in handling other problems exhibited by the same child. This was of special concern because as behavioral approaches came more into public view, many of the criticisms of such rapid and short-term training programs were about the specificity of problems treated and the possibly limited time span that improvements might last. Naturally enough, these objectives were in response not only to the building scientific database but also to the real-world needs of client agencies, insitutions, families and children.

Related Influences. Just as the field reached the point when it needed to answer the questions raised by those three questions : 1)What techniques were most effective in changing children's behavior? 2) What techniques were important in changing parental behavior? 3) How long did these improvements last and did they result in generalized improvements in parent-child interactions? tremendous improvements in behavioral measurement techniques had taken place such that these questions could be answered. The development of more

sophisticated measurement systems that included the sequential measurement of many behaviors of interactive dyads spurred on the research needed to respond to those questions. The combination of complex behavioral coding systems and the interval-by-interval method of recording mastered by human observers provided the opportunity to measure dyadic family interactions in nearly microscopic units (e.g., Patterson, Ray, Shaw, & Cobb, 1969). Such microscopic analyses could result in unit-by-unit analyses of behavioral sequences and contingencies. The use of human observers skilled in using such complex observational systems also meant that both the range of interaction settings and behaviors measured could be expanded to include many more applied settings, especially the home. Evaluation, through measurement of generalization in the target settings, was now possible. Additionally, from an applied, problem-solving view point, the training itself could be conducted in the target settings in which the family's problems were exhibited, a strategy likely to enhance the effects of training and especially generalization.

Although the use of trained human observers may have yielded the most complex and strongest data on family interactions, such an approach was (and continues to be) a fairly expensive measurement approach. Consequently, in an attempt to respond to applied settings limited resources and unlimited needs for family interventions, researcher-clinicians attempted

to use simpler paper-and-pencil questionnaires filled out by parents describing their children's behavior. Research on the accuracy of parent reports when compared with outside observers' measurement of actual child behavior ensued (e.g., Johnson & Christensen, 1975). Unfortunately, this research indicated that parental accuracy was extremely variable. Indeed, parental verbal behavior as measured through parent-report questionnaires on children's behaviors initially appeared to be of limited value as an outcome measure. However, later research suggested that parents could be trained to report on their children's behavior more accurately (e.g., Johnson & Bolstad, 1973), that more effective techniques of retrieving the information from parents could improve accuracy (e.g., calling the parent on a daily basis--Jones, Reid, & Patterson, 1975), and that by limiting the type of information acquired to very specific, well-defined behaviors (e.g., Hall, Axelrod, Tyler, Grief, Jones, & Robertson, 1972) resulted in more accurate parental reporting. Although these data were valuable in the measurement of changes in children's behavior--the first-order dependent variable, such data yielded little knowledge about the major objectives in the field during this time period. Parental report data were of limited value in the evaluation of parent-training techniques and in the measurement of generalization. Clearly, <u>how</u> the measurement of behavior change in families occurred became as important as <u>what</u> measures of behavior change were used.

Measurement. Measurement issues during this mid-period in behavioral family research and therapy played a crucial role in both the knowledge gained about how families develop and are taught to resolve difficulties. In fact, the shift that occurred related to change in the basic conceptualization of child behavior problems in the home. During the early period, the focus was on the child and child-behavior problems. As a result, measurement was usually restricted to changes in children's behavior. During the mid-period, the focus shifted to the parent-child dyad and their interaction problems. As a result, measurement of both parent and child behaviors using sequential-interactive models to analyze contingent relationships were adopted (e.g., Herbert & Baer, 1972). Both the first-order dependent variable (child behavior) and the independent variable (parent behavior) were measured. Thus, the effects of parent training on both parent and child behavior were measured.

Additionally, information was obtained on the contingent relationships of parent-child interactions. As a result, the first two objectives (what behavior change techniques were most effective in improving child behavior and what techniques were necessary and effective in changing parental behavior) could be answered through the measurement of both parent and child behavior.

Much research during this period was also directed toward comparing the types and quality of data collected via different types of measures of child-behavior change--the reliability

and validity of questionnaire data versus data obtained through direct observation (a topic discussed earlier -- e.g., Eyberg & Johnson, 1974; Johnson & Bolstad, 1975).

With the use of more sophisticated behavioral coding systems and human observers, measures of the generality of parent training and durability of improvements were possible in response to the final objective. Objective measurement of behavior changes across settings, in response to different behavior problems, and with different children in the family, combined to present a relatively clear picture of the outcome of parent training.

Findings. The importance of the results of this period were underscored by researchers not directly in the field of behavioral parent training. The work of social policy-makers and educators in building early intervention programs such as Head Start began to document the importance of successful parenting and parent involvement in children's intellectual growth. A number of researchers were publishing data that clearly indicated that mothers' interaction and teaching styles with their young children were the most important and stable predictors of children's later academic performance (e.g., Baumrind, 1971; Shipman, McKee, & Bridgeman, 1976, 1977; Bradley & Caldwell, 1977, and Gordon & Guinagh, 1974; Walberg & Marjoribanks, 1973). Behavioral parent training programs were teaching exactly those skills correlated with children's improved academic performance: clear, direct instructions,

positive feedback, use of rationales, and firm limit-setting. Basically, the findings of the early period in parent training demonstrated that parents could indeed be taught the teaching-interaction skills that the work of developmental psychologists demonstrated as crucial to successful child developmental outcomes.

In terms of meeting the first objective during the mid-period, the progress was remarkable, and occasionally, disconcerting. A number of child behavior change techniques were evaluated and found effective in modifying children's behavior. The skill most frequently taught (having well-documented effectiveness) was the use of differential attention. Parents were taught to use social reinforcement for their children's positive, cooperative behaviors and to withhold their attention when their children engaged in negative, oppositional behaviors (e.g, Herbert & Baer, 1972; Miller & Sloane, 1976). This procedure was found effective when used alone or in conjunction with a mild punishment procedure such as time out (e.g., Moore & Bailey, 1973; Forehand, Cheney, & Yoder, 1974; Budd, Green, & Baer, 1976; Peed, Roberts, & Forehand, 1977; Kelley, Embry, & Baer, 1979). The use of rules, prompts, and clear instructions were also found effective when taught prior to, or simultaneously with differential attention (e.g., Miller & Sloane, 1976; Kelley, Embry, & Baer, 1979). Other techniques also taught to parents included contracting, conflict negotiation skills (e.g., Kifer, Lewis,

Green, & Phillips, 1974; Aragona, Cassady, & Drabman, 1975), and the management of token systems (e.g., Phillips, Phillips, Fixsen, & Wolf, 1971; Christophersen, Arnold, Hill, & Quilitch, 1972).

The occasional disconcerting findings were that differential attention alone could "backfire" and worsen children's behavior until a punishing procedure was added, usually time out (Herbert, Pinkston, Hayden, Sajwaj, Pinkston, Cordua, & Jackson, 1973) or point fines and token loss (Walker, Hops, & Feigenbaum, 1976); and that the use of rules, clear instructions, or limit-setting alone produced limited improvements requiring additional reinforcing or punishing consequences to produce significant improvements in children's behavior (e.g., Kelley, Embry, & Baer, 1979). Despite these occasional, but important surprises, behavioral researchers in parent training had developed an effective arsenal of techniques for modifying children's behavior in the home that could be taught to parents.

This brings us to the second objective, which was to describe and evaluate techniques for changing parental behavior. There was one major technique most frequently employed and found to be effective in modifying parents' behavior. Instructional feedback was usually the approach employed to accomplish parent training, which is a collection of techniques that includes instructions, modeling

by the therapist, role playing by the parent and the therapist, and experimenter feedback in verbal and graphical forms (e.g., Peed, Roberts, & Forehand, 1977; Nordquist & Wahler, 1973; Budd, Green, & Baer, 1976). Occasionally, a self-monitoring procedure was included (which was proven effective as a sole training technique by Herbert & Baer, 1972) (e.g., Miller & Sloane, 1976; Kelley, Embry, & Baer, 1979). Typically, the training was carried out during sessions in which the parents were interacting with their children and took place in the home (e.g., Kelley, Embry, & Baer, 1979), in the clinic (e.g, Peed, Roberts, & Forehand, 1977; Budd, Green, & Baer, 1976), or in both settings (e.g., Wahler, 1969).

Other techniques to accomplish parent training were also implemented. A procedure in which the parent wore a small radio receiver in the ear to receive therapist feedback, "bug-in-the-ear", was effective (e.g., Nordquist, 1971). Such training was, of course, restricted to laboratory or clinic settings. Videotape modelling, self-instruction booklets, and group parent-training classes were also techniques used to teach parents child management skills (e.g., O'Dell, Mahoney, Horton, & Turner, 1979; Azrin & Foxx, 1974; Hall, Axelrod, Tyler, Grief, Jones, & Robertson, 1972). The outcomes from the evaluations of these techniques indicated that they could be effective but often needed to be used in conjunction with instructional feedback for maximal effect

or required special settings or equipment to be used effectively.

Nevertheless, by the end of the seventies, a well-established body of literature existed that represented a technology of behavior change for children that could be taught to parents by behavioral clinicians. This technology was characterized by its applicability to remediation of a wide variety of child behavior problems, a well-defined collection of proven training techniques to modify parental behavior, and a growing concern about the possibly limited generality of behavioral parent training to specific problems, populations, settings, and time periods.

In answering those larger questions about the effectiveness of training techniques for parents and children, much data had been generated that indicated there were some significant problems to resolve before a widely-applicable, long-lasting technology for resolving parent-child interaction difficulties could be achieved. Three issues arose which dealt with the basic questions of generality and durability of behavior changes produced by parent training. The first issue I alluded to earlier. It appeared that certain child behavior change techniques that were taught to parents were not always adequate to produce improvements in child behavior and sometimes worsened the problems (e.g., differential attention and time out--Herbert, Pinkston, Hayden, Sajwaj, Pinkston, Cordua, & Jackson, 1973). Secondly, certain parents did not or

could not learn the skills taught (e.g., Patterson & Fleischman, 1978; Herbert & Baer, 1972). Apparently, additional skills or training techniques would have to be taught or employed with certain parents to achieve the same level of success obtained with more typical procedures. And, unfortunately, even if the parents and children exhibited significant improvements at the end of training, they did not always maintain those skills over time or generalize those skills to other settings (e.g., Wahler, 1980; Patterson, 1974). (For a complete review of this issue, see Forehand and Atkeson, 1977).

A fourth problem also became clear from the research completed on the accuracy of parental report data in measuring child-behavior change. The attempts to find low-cost, efficient, and accurate measures of child-behavior change indicated that sometimes, but not often, parental descriptions of their children's behavior (questionnaires) reliably matched directly observed behavioral change or failure to change. Most often parents reported improvements when there were none. Thus, even ascertaining the actual behavior changes of parents and children in training appeared more difficult than the training itself.

All of these problems point to the next major research areas to be pursued. Because all of these problems occur sometimes but not always, there must be particular characteristics of the children, the parents, the training techniques, the measurement techniques, and the target behaviors that either facilitate or hinder successful parent-training outcomes. The next period of research, Current work--Family Focus

has begun to address just these issues.

Current Period: Family Focus.

Objectives. If one were to compare the processes involved in the development of behavioral parent training research to those operating in human development according to Piaget (1950), the first two time periods would represent the process of accomodation in which new constructs and conceptual schemas are developed. This current phase of development would represent the process of assimilation in which new information is added to an expanding conceptual schema. The information acquired in the next decade will include: a) the application of behavior technology with broad generality across populations to solve specific parent-child difficulties; b) the development of effective, proven techniques to teach parents who have hitherto not learned the child-management skills typically taught or represent special populations who have rarely received assistance--e.g., abusive parents, minority families, and families of adolescents; c) the documentation of the comparative effectiveness of various parent-training techniques, e.g., group vs. individual training, training in the clinic vs. training in the home, and skills-only training versus conceptual knowledge plus skills training; and d) the exploration of characteristics of families who do not generalize or maintain the skills taught such as socially isolated families (Wahler, 1980).

These objectives have grown out of the success of previous work with handicapped and behavior-problem children and their families such that the technology is probably strong enough to withstand the individualization that will be necessary for that same technology to be effective with especially difficult populations (e.g., abusive parents--Sandler, VanDercar & Milhoan, 1978). But these objectives have also grown out of the problems encountered in which well-established techniques to train parents or to improve children's behavior have not resulted in the expected improvements, maintenance or generalization.

Related Influences. Success in resolving these rising concerns will be built not only on the expanding informational base of behavioral parent researcher-clinicians but also on the acquisition of information and technology from related disciplines. Work with special populations of children and families who have been the focus of other disciplines' efforts brings an understanding of how the family's relationships in their community and culture can impact the design of effective behavioral intervention programs. Adapting our technology to the ecological context of the family appears to be crucial to program success. For example, the work done by sociologists on community support networks (e.g., Collins & Pancoast , 1976) has been integrated into work done with insular families by Wahler and his colleagues (Wahler, Berland, Coe, & Leske, 1977). The inclusions of an additional treatment component for identified insular families, the mand review process, has resulted in improved treatment outcomes for the parent

training component. Work completed by communication specialists has pointed out the importance of teaching conflict-resolution skills to teenagers and their parents rather than direct contingency-management procedures (e.g., Kifer, Lewis, Green, & Phillips, 1974). Coupled with the careful measurement of behavior change, the influence of these related findings can only strengthen the development and individualization of our current parent training technology.

Measurement. The growing complexity of interventions has been paced by the increasing sophistication of the measurement technology. The use of multiple-outcome measures to assess program effectiveness has almost become de riguer. Assessment packages have become as comprehensive as the intervention packages they are designed to monitor. Research during the mid-period clearly indicated the need for multiple measures including direct observation of child and parent behavior change, questionnaires probing families' perceptions of change, consumer satisfaction measures to maintain program support, and cost-benefit analyses of various therapeutic approaches. The proliferation of such measures speaks to the expanded audience that behavioral researcher-clinicians are addressing. This much larger audience requires more and different kinds of information upon which to base their judgements of treatment efficacy.

Program effectiveness will also be measured by the generality and durability of its effects. Measures of child

and parent generalization of behavior change across settings and behaviors must be added to our assessment of immediate changes in child and parent behavior. Additionally, durability or the impact of training over lengthy periods of time, in some cases over several years, will become important to social policy planners looking at the increasing demands for effective, less-expensive alternatives in mental health services.

Consonant with the expansion of measurement to include first the child's behavior, the dependent variable, and then the parents' behavior, the first-order independent variable, the widespread adoption of behavioral interventions for families will require the measurement of the second-order independent variable, the therapists' behavior. Adoption of the technology (or failure of replication attempts) has only emphasized the need to document accurately just what effective parent trainers actually do to change parental behavior, and what those parents, in turn, do to change their children's behavior. Maintenance of the integrity of treatment models will also be crucial to the comparative evaluation of differing behavioral parent training interventions.

Finally, it will be necessary to measure a wide variety of specific characteristics of children, parents, therapists, and settings in order to pinpoint those characteristics that may impact the type of training program employed, the immediate outcome of intervention, and the long-term success of

treatment. This integration of many sources of information for diagnostic and evaluative assessment has been described as the "ecobehavioral" approach (e.g., Rogers-Warren & Warren, 1977). The ecobehavioral approach expands the analysis of interactive relationships to include ecological variables such that the behavioral relationships are evaluated from a contextual perspective. The adoption of a ecobehavioral approach in the assessment and treatment of parent-child interactions will make it possible to develop family-specific intervention programs, to monitor carefully changes taking place in families' relationships, to assess the commonalities of needs across families, and to evaluate systematically various intervention strategies' effectiveness both within and across families (Embry, 1980).

Findings. It is my belief that the results of such intensive, but comprehensive, analyses of family functioning and interventions will result in two rather different approaches to parent training. Although this is supposition on my part, it appears that the field has already begun dividing itself into the development of problem-specific interventions and into the development of more general and comprehensive interventions. These two approaches, Problem-Specific and General, will yield very different informational and intervention outcomes. Examples of each type are shown in Table 1. Researchers using the problem-specific approach have focused on the development of interventions for very specific and time-limited child-rearing problems. Researchers

engaged in general work have focused on the development of parent-training interventions for difficult-to-treat populations or the development of effective techniques with which to accomplish either general or problem-specific parent training. The distinguishing characteristics of each type extend throughout their work. Differences may be found in the objectives, the measurement and training techniques employed, and the results of the research.

The main objective of problem-specific research is to solve a particular child-rearing problem. As a result, interventions are often age-specific and the techniques employed are specially designed to remediate the difficulty quickly and acceptably, e.g., positive practice for toileting accidents (Azrin & Foxx, 1974). These programs are designed for normal parents and children. The programs are very effective (Clark, Greene, Macrae, McNees, Davis, & Risley, 1977; McMahon & Forehand, 1979), and the intervention techniques are described in detail. Because most of the programs are to be used without professional assistance and implemented solely by the parents, specification of each step and action to be taken is an absolute necessity to maintain program integrity in order to insure the program's success. Thus, these programs have wide applicability, because they are designed to remediate common child-rearing difficulties that nearly all families face, and these programs are easily replicated because of the comprehensive and precise detailing of the first and second order independent

variables, the child behavior change techniques to be used by the parents, and the techniques used to change parental behavior.

Naturally enough, there are some limitations inherent in such an approach. Such precise specification can limit the applicability of the program such that if anything goes differently or wrong during implementation, the parent may not know how to adapt the program to resolve the interjected difficulty. For example, occasionally when parents in our program have attempted to use Azrin & Foxx's toilet training procedures, they have not been successful. If the child cried or protested with any intensity at the first step of the program (which is simply putting on the "training" pants), the parent would terminate the training program. What seemed to happen is that parental concern about assurances that the training program must be enjoyable for the child resulted in the parent responding solicitously to the child's protests, resulting in the child increasing the intensity of the protests, at which point the parent would completely terminate the training experience.

Additionally, families with a handicapped child or with parent-child interaction problems may not find the materials or techniques readily adaptable without professional assistance. Although these programs are clearly effective in remediating the target behavior problem, they do not

teach child-management skills that may be generalized to other settings, children, or behaviors. Thus, these programs are widely applicable across families or children of the same age or experiencing the same difficulty but of limited individual generality within families. Nevertheless, the problem-specific approach's strength lies in its capability to solve problems easily and efficiently, not in the limited knowledge it generates about family growth and development.

Conversely, the general, family development approach yields much information about changes in the family system, but is much less efficient at producing tightly focused, highly effective problem solutions for common child-rearing difficulties. The characteristics that distinguish such an approach include an emphasis on careful, complex, and comprehensive measurement; work with special, often more difficult to treat, populations of children and parents experiencing severe and pervasive difficulties; and the use of additional intervention techniques to support child management skills training. Typically, interventions are much longer in duration and involve direct contact with the therapist in the training or problem setting. Additionally, comparative evaluations of specific child and parent training techniques are possible.

Although this approach has greater utility within families for producing generalized improvements across settings (Peed, Roberts, & Forehand, 1977; Embry, Kelley, Herbert, & Baer, 1978) and behaviors (Wahler & Fox, 1980), its applicability

for a wide range and large number of families is not known. However, this problem may be related more to the cost of carrying out such research rather than the possibility that the findings may not be representative of family interventions. It seems probable that these approaches are widely applicable to families with less severe difficulties if they are effective with families with more severe problems. The strength of the more general approach to family intervention research is its careful documentation of the effects of treatment strategies on the family system and its capability to pinpoint characteristics of families, therapists, and training techniques that are crucial to program success, rather than its immediate problem-solving capability.

Despite these differences, both approaches face some common problems. The documentation and measurement of the dependent and independent variables involved is an absolutely necessary step before the replication or expansion of particular interventions will be possible. We also need to know not only how parents may teach their children effectively, but also how we, as parent educators, may teach parents effectively and provide the appropriate support so that parents can maintain and generalize the skills they have acquired through our interventions.

This division of approaches in parent training will have two important outcomes. First, we will begin to have an extensive technology to solve common child-rearing difficulties, and second, we will begin to elucidate the processes

that actually occur in families' lives that relate to family outcomes. This combination of approaches will strengthen the design of our intervention strategies for family systems such that we will be better able to prescribe specific child and parent training techniques tailored to the individual family's needs and strengths, increasing both the effectiveness and generality of our interventions.

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Table 1: Examples of Problem-Specific and General Family Development Parent Training

Researchers	Target Child Behavior	Child Characteristics	Family Characteristics	Mode of Training
PROBLEM-SPECIFIC				
Azrin & Fox (1974)	Toilet Training	Normal Toddlers (18 mos to 3 yrs)	Normal	Book
Clark, Greene, Macrae, McNees, Davis, & Risley (1977)	Shopping Trips	Normal Elementary School-Age Children	Normal	Pamphlet
Christophersen (1977)	Car Seat Usage	Normal Infants & Preschoolers	Normal	Pediatrician's Handout & Lecture
Embry & Malfetti (1981)	Safe Play Near the Street	Normal Preschoolers	Normal	Storybooks & Parent Workshop
GENERAL FAMILY DEVELOPMENT				
Patterson	Aversive Behavior Aggression Stealing	Deviant Elementary School-Age Children & Adolescents	Coerced Referrals	Clinic & Home One on One with Therapist
Wahler	Child Compliance Solitary Toy Play	Behavior Problem Elementary School-Age Children	Socially Isolated Coerced Referrals	Clinic & Home One-on-One with Therapist
Forehand	Child Compliance	Normal & Handicapped Preschool & Elementary School-Age Children	Normal & Clinic-Referred	Clinic One-on-One with Therapist
Embry	Child Compliance Appropriate Child Behavior	Abused, Handicapped, & Normal Preschoolers	Normal, Clinic-Referred, & Coerced Referrals	Home One-on-One with Therapist